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August 6, 1999

VIA HAND-DELIVERY

Magalie Salas, Esq.
Secretary
Federal Communications Commission
Room TW-B204
445 12th Street, S.W.
Washington, D.C. 20554

Re: CC Docket No. 97-160

Dear Ms. Salas:

Enclosed please find an original and four copies of the Reply Comments of Roseville Telephone Company in response to the Commissions Further Notice of Proposed Rulemaking in the above-captioned docket.

If there are any questions regarding this matter, please contact me.

Sincerely,

Paul J. Feldman
Counsel for Roseville Telephone Company

Enclosure

cc: Mr. Greg Gierzcak (w/encl.)
George Petrutsas, Esq. (w/o encl.)

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In the Matter of	)	
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Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
	)	
Access Charge Reform	)	CC Docket No. 96-262
	)	
Forward Looking Mechanism for High Cost Support for Non-Rural LECs	)	CC Docket No. 97-160
	)	
	)	

REPLY COMMENTS OF ROSEVILLE TELEPHONE COMPANY

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August 6, 1999

TABLE OF CONTENTS

I. Introduction 2

II. The Commission's Model, Especially as Applied to Roseville, is Deeply Flawed, And Should Not be Applied to Mid-Sized Carriers as Roseville 3

III. The Record Supports Use of a Carrier-by-Carrier Hold Harmless Principle, and Such an Approach is Also Mandated by the Joint Board and by the Communications Act 7

IV. Conclusion 11

In the Matter of	)	
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
	)	
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TABLE OF CONTENTS

I. Introduction 2

II. The Commission's Model, Especially as Applied to Roseville, is Deeply Flawed, And Should Not be Applied to Mid-Sized Carriers as Roseville 3

III. The Record Supports Use of a Carrier-by-Carrier Hold Harmless Principle, and Such an Approach is Also Mandated by the Joint Board and by the Communications Act 7

IV. Conclusion 11

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
Access Charge Reform	)	CC Docket No. 96-262
	)	
Forward Looking Mechanism for High Cost Support for Non-Rural LECs	)	CC Docket No. 97-160

REPLY COMMENTS OF ROSEVILLE TELEPHONE COMPANY

Roseville Telephone Company ("Roseville") hereby submits its Reply Comments in response to the Commission's *Further Notice of Proposed Rulemaking* in CC Docket Nos. 96-45 and 96-262, FCC 99-119, released May 28, 1999 (hereinafter, the *"FNPRM"*), and to the Commission's *Further Notice of Proposed Rulemaking* in CC Docket No. 97-160, FCC 99-120 (released May 28, 1999)("*FLEC Notice*").[1] In these Reply Comments, Roseville demonstrates that the model proposed by the Commission for use in calculating federal high cost support is seriously flawed, especially as applied to Roseville: under the model, it appears that Roseville is one of only two non-rural LECs in the country that would lose all of its federal high-cost support under each of the proposed benchmark scenarios. Roseville also demonstrates herein that the

[1] Section II of these Reply Comments addresses issues raised in Section V.B.1 of the *FNPRM*, and in Section IX.A of the *FLEC Notice*. Section III of these reply Comments addresses issues raised in Section V.D of the *FNPRM*. For the convenience of the Commission's staff, a copy of these Reply Comments is being filed in each docket.

record in these proceedings supports the requirement that the proposed "hold-harmless" principle be applied on a carrier-by-carrier basis, rather than on a state-by-state basis. Roseville urges the Commission not to use this flawed model to determine high cost support for any carriers, or at very least for mid-sized carriers such as Roseville. Furthermore, the Commission should use a carrier-by-carrier hold harmless principle.

I. Introduction

Roseville is an incumbent local exchange carrier ("ILEC") serving subscribers in 83 square miles, with central office locations serving the Roseville and Citrus Heights, California area. Roseville has been providing high quality communications services to its subscribers for over 85 years, and currently serves approximately 128,000 access lines. While Roseville's access line count places it a mere 28,000 access lines above the definition of "rural telephone company", it is among the smallest of the non-rural LECs ("NRLECs"). To the extent that larger companies can use their size to create greater cost savings, Roseville is in fact closer to rural companies than to the giant NRLECs with which Roseville is being categorized, for the purpose of federal high cost support. As reported in USTA's 1998 *Phone Facts*, SBC Communications has over 36 million more access lines than Roseville.

As the carrier of last resort for local subscribers, Roseville takes very seriously its obligation to provide high quality local exchange services at a reasonable cost to the end-user. In previous Commission proceedings on universal service, Roseville has expressed its deep concern that the use of proxy cost models to establish federal high

cost support allocations could lead to substantial errors when applied to the differing circumstances of each individual carrier, and that such errors could significantly effect the rates that subscribers pay for service. Unfortunately, upon review of the latest version of the Commission's model for estimating the forward-looking costs of providing the supported services, it appears that Roseville's concern's have been realized: Roseville's federal high cost support would be reduced to $0 from it current level of approximately $6 million per year. This complete loss of federal support will without doubt create significant pressure to raise rates.

As shown below, the figure produced by the model is a result of flawed assumptions in the model that do not reflect the reality of the situation in Roseville's service area. Roseville strongly urges the Commission to appropriately revise its model prior to using it to establish federal high cost support, even if the revision to the model requires continuing the current high cost allocation methodology into the year 2000. In addition, Roseville strongly urges the Commission to adopt a "hold-harmless" policy for distribution of high cost support on a carrier-by-carrier basis, rather than on a state-by-state basis. The state-by-state approach is inconsistent with the requirements established by the Joint Board, and is inconsistent with the requirements of Section 254 of the Communications Act. Most importantly, the carrier-by-carrier approach is more likely to prevent the rate shock that the hold-harmless principle is designed to limit.

II. The Commission's Model, Especially as Applied to Roseville, is Deeply Flawed, And Should Not be Applied to Mid-Sized Carriers Such as Roseville.

As noted above, Roseville has in previous times in these proceedings, expressed deep concern regarding the inability of a proxy model to accurately determine the cost of service for every ILEC in the country. Roseville has the folllowing concerns about the Commission's recent "Synthesis" Model, and its proposed use in determining explicit universal service support for NRLECs under the Commission's proposed new mechanism:

-The use of any proxy model for small non-rural LECs like Roseville is inappropriate and will produce harmful results; and

-The Synthesis Model is inaccurate and the proposed inputs do not reflect the forward-looking cost of companies like Roseville.

Numerous parties filed comments on the Synthesis Model. Roseville has reviewed these comments and conducted its own review of the Synthesis Model output results for Roseville. Based on these reviews, this model is inappropriate for use in determining explicit high-cost support, at least for Roseville. Specifically:

-It is premised on the instantaneous construction of an unrealistically "efficient" fantasy network.[2]

-It includes a number of very questionable costing assumptions all of which have the impact of pushing the cost down.[3]

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[2] Bell Atlantic Docket 97-160 Comments at i.

[3] Bell Atlantic Docket 97-160 Comments at 6, Bell South Docket 97 160 Comments at 1, SBC Docket 97-160 Comments at 2, U S WEST Docket 97-160 Comments at 4.

–The model and its underlying code is a virtual "black box" incapable of analysis and review by even the most skilled programmers.[4]

–The data used to locate customers within the wire center is not available for public inspection or use, and the "road surrogate" data that is available is seriously flawed.[5]

–It is premised on a single set of nationwide cost inputs that will be used for all NRLECs.[6]

–The methodology utilized to derive these inputs is seriously flawed.[7]

Beyond the flawed nature of this particular proxy model, however, Roseville believes that the application of any national model for the determination of explicit universal service for a small NRLEC such as Roseville is inappropriate. One single set of national data cannot accurately capture the cost of serving all NRLEC territory. Of the 93 NRLEC study areas, the top 10 serve over 50% of the lines.[8] Of necessity, this data is heavily weighted to the cost of serving large metropolitan areas. Based on the data in the model, the ratio of the largest NRLEC study area to the smallest is approximately 160 to 1, and this occurs in California between SBC-California (16

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[4] U S WEST Docket 97-160 Comments at iii.

[5] Bell Atlantic Docket 97-160 Comments at 13, GTE Docket 97-160 Comments at 36.

[6] Sprint Docket 97-160 Comments at 2.

[7] See Attachment C to Bell Atlantic Docket 97-160 Comments, Affidavit of Harold Ware and Christian Michael Dippon, National Economic Research Associates, Inc., See also Attachment A to Bell South Docket 97-160 Comments, Comments of Georgetown Consulting Group, Inc, See also Attachment A to U S WEST Docket 97-160 Comments, Comments of Greg Attiyeh and William Fitzsimmons, LECG, Inc.

[8] Sprint Docket 97-160 Comments at 2.

million lines) and Roseville (102 thousand lines).

An examination of the Synthesis Model demonstrates specific flaws when applied to Roseville. Attached to these Reply Comments is an analysis performed by the consulting firm of McLean & Brown. As demonstrated in the analysis, Roseville's costs, as reported in NECA's 1998 USF annual filing, were 123% of the nationwide average. However, when the Synthesis model is run for Roseville, the Company comes out at 88% of the national average. Examining the underlying data, it appears that the model has incorrectly located Roseville customers, and either missed or miscategorized customers located in the more remote portions of the Company's serving territory. This would be consistent with the location problems identified by many of the other commenters.[9]

A proxy model, by its very nature, is an inexact estimate of cost. Some wire center's cost may be overestimated and others may be underestimated. For large NRLECs with hundreds of wire centers, these errors will tend to cancel out, assuming all other aspects of the model and its input are accurate. Roseville, however, has only two wire centers. Accordingly, when the model is applied to a carrier like Roseville and contains an error regarding a wire center, the impact on the carrier is greatly magnified becuase that wire center constitutes a much greater proportion of Roseville's operations.

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[9] Bell Atlantic Docket 97-160 Comments at 13, GTE Docket 97-160 Comments at 36.

Roseville believes that if the Commission chooses to utilize a proxy model for NRLEC high-cost funding, that this be done only for the largest of the NRLECs.[10] Roseville suggests that this is an area where mid-sized carriers (such as Roseville) should be treated differently than the largest ILECs. For the smaller of the NRLECs, the goals of the Telecommunications Act of 1996 will be best achieved by treating these carriers in a manner more similar to the rural LECs.

III. The Record Supports Use of a Carrier-by-Carrier Hold Harmless Principle, and Such an Approach is Also Mandated by the Joint Board and by the Communications Act.

As shown above, the model proposed by the Commission would result in Roseville being one of two NRLECs in the country that would not qualify for any federal high cost support. Such a result will place significant pressures on the rates that Roseville must charge to provide service. Yet, in anticipation of the possibility of rate shock caused by the transition to the new proxy-model based methodology, the Joint Board recommended that the Commission apply a hold-harmless principle under which carriers would receive at least their current amount of federal high-cost support as carriers (and their subscribers) adjust to the new regulatory environment. In the *FNPRM*, the Commission seeks comments as to whether the hold harmless principle should be applied on a carrier-by-carrier ("CBC") or on a state-by-state ("SBS") basis. As will be shown below, there is support in the record for the CBC approach. Furthermore, such an approach is mandated by the action of the Joint Board and the

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[10] See also Sprint Docket 97-160 Comments at 3.

requirements of the Communications Act.

A. The Record Supports Use of the CBC Approach.

Numerous commenters suggested that the Commission use the CBC approach. *See, e.g.,* Comments of GVNW Consulting at page 9, and TDS Telecommunications Corp. at page 10. GTE supported the CBC approach as necessary to limit rate shock, and noted that use of the SBS approach could result in distribution of federal funds to the states as "block grants", a result that not only adds an unnecessary additional level of administration, but makes the allocation of federal funds subject to state political pressures. Comments of GTE at pages 36-37. SBC notes that the CBC approach promotes portability of support and competition. Comments at page 10. ITCs, Inc. supports the CBC approach, and notes that the SBS approach could lead to inconsistent results for carriers operating in multiple states. Comments of ITCs at page 7.

Some commenters supported the SBS approach, or even call for forbearance from applying any hold harmless principle, but this position is not persuasive. Most of those commenters base their views on the assertion that use of the CBC approach will inevitably lead to a larger total federal universal service fund than use of the SBS approach, or than sole use of the new forward-looking methodology. *See, e.g.,* Comments of MCI WorldCom at page 14, Comments of AT&T at page 15, and Comments of the Iowa Utilities Board at page 5. However, without any actual calculations by any party or the Commission, it is far from certain that in actual practice, in the face of growing competition and increasingly efficient networks, a CBC hold

harmless approach would in fact create a significantly larger total federal fund than other approaches. Nevertheless, even if the CBC approach did create a larger federal fund than use of a proxy model without a hold harmless principle, such a result is consistent with Section 254 (b) of the Act which requires the Commission to create specific, predictable and sufficient federal support mechanisms, but does not require the Commission to ensure that the total amount of federal high cost support remains at the lowest level possible, regardless of the results.

B. An SBS Approach is Inconsistent with the Joint Board's Recommendation.

In contemplating the impact of a major revision to the methodology for allocating federal funds, the Federal-State Joint Board explicitly expressed its concern that such a revision could result in substantial reductions to individual carriers, and that a result of such reductions "some consumers could experience rate shock." *See*, Federal-State Joint Board on Universal Service, Second Recommended Decision, 13 FCC Rcd 24744 (1998)("*Second Recommended Decision*") at 24763. In order to prevent or limit such rate shock, the Joint Board recommended use of a hold-harmless principle. While the Joint Board recognized the Congressional mandate to ensure that states do not receive less funding as a result of new mechanisms, the Board made it clear that the hold-harmless principle is to be executed by holding each carrier in those states harmless: "no non-rural carrier, ... will receive less federal high cost assistance than the amount it currently receives from explicit support mechanisms." *Id.* at page 24764. Accordingly, it is clear that the Joint Board recommended use of a CBC approach to the hold harmless principle. Yet, the *FNPRM* provides no explanation for why the Commission

proposes to ignore that recommendation, or the statutory basis under which the Commission may ignore that recommendation.[11]

Use of the SBS approach also leads to the following contradiction: to the extent that the SBS approach results in reductions of federal support to individual carriers, as suggested in paragraph 120 of the *FNPRM*, then this will create the very threat of rate shock that the Joint Board's hold harmless principle was designed to prevent. The Commission should not adopt a hold harmless principle that creates the very problem it is intended to remedy.

C. The SBS Approach is Inconsistent with Section 254(b)(5) of the Act.

In addition to contradicting the *Second Recommended Decision*, the SBS approach is also inconsistent with the requirements of Section 254(b) of the Communications Act. That Section requires that federal universal service policies provide specific, predictable and sufficient mechanisms to preserve and advance universal service. Nothing in the *FNPRM* demonstrates that the SBS approach is consistent with this statutory requirement. Indeed, such a showing cannot be made:

> -to the extent that the SBS approach allows state commissions to decide how to allocate federal funds, and those commission can change their allocation principles from year to year, this uncertainty of result is inconsistent with the requirement that federal funding be specific and predictable.
>
> -to the extent that the SBS approach contemplates reductions of federal funds allocated to an individual carrier like Roseville, then this result is inconsistent with the requirement that federal high cost support mechanisms provide sufficient funding: a carrier that has demonstrated under the current mechanism

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[11] Section 254(a)(2) twice states that the Commission "shall implement" the recommendations of the Joint Board. It is well recognized in federal case law that "shall" is the language of a requirement.

> the need for its current level of federal support could lose some or all of that support solely on the basis that other carriers in the state are entitled to an increase in support. This reduction of support to an individual carrier regardless of that carrier's need is also likely to produce rate shock, which is inconsistent with the Section 254(b)(5) requirement that federal mechanisms preserve and advance universal service.

None of the Comments in Docket 96-262 demonstrate that the SBS approach is consistent with the requirements of Section 254(b)(5). However, numerous commenters demonstrate that the SBS approach is inconsistent with the requirements of Section 254. *See, e.g.*, Comments of TDS at page 11, GVNW at page 9.

D. The SBS Approach is Inconsistent With Section 254(e) of the Act.

Section 254(e) of the Communications Act provides that "...only an eligible telecommunications carrier shall be eligible to receive specific Federal universal service support." To the extent that the SBS approach includes payment of federal high cost support directly to state commissions, for their allocation to carriers within their states, this directly contradicts the requirements of Section 254(e) that only a carrier may receive federal high cost support. Neither the *FNPRM* nor the record in Docket 96-262 provide any basis as to why the Commission may ignore this statutory mandate.

IV. Conclusion

The record demonstrates that the current "Synthesis" cost model is deeply flawed, both as a general matter, and specifically as applied to Roseville. The Commission should not use the current model to determine federal high cost support for any carriers, or at very least, for mid-sized carriers such as Roseville. In any case, the record supports use of the carrier-by-carrier hold harmless principle, and use of that

principle is especially necessitated in light of the obvious flaws of the current model.

Respectfully submitted,

ROSEVILLE TELEPHONE COMPANY

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August 6, 1999

FCC Synthesis Model
Analysis of Results for Roseville Telephone Company

Introduction

At the request of the Roseville Telephone Company McLean & Brown has undertaken an analysis of the impact of the FCC Synthesis Model on the Roseville study area. Due to the short time available for the review, our analysis has been necessarily limited.

On October 28, 1998, the FCC released its *Platform Order* in the Universal Service proceeding CC Docket Nos. 96-45 and 97-160. The purpose of this portion of the proceeding was to select a proxy model for the development of forward-looking economic costs (FLEC) for non-rural Local Exchange Carriers (NRLECs). Previously, at the recommendation of the Universal Service Joint Board, the FCC had concluded that FLEC should be used in determining the explicit support for NRLECs under the new explicit funding mechanism. For almost two years the FCC had conducted a review of two proxy models – the Benchmark Cost Proxy Model (BCPM) supported by BellSouth, Sprint and U S WEST, and the HAI Model supported by AT&T and MCI. Towards the end of the review process, the FCC Staff introduced its own model the Hybrid Cost Proxy Model (HCPM). In the *Platform Order* the FCC did not select any of these models but rather announced that it would construct a "synthesis" of the best aspects of the three models. Since the FCC first unveiled its "Synthesis Model" the model platform has undergone at least eight significant changes in logic. With each change the Synthesis Model has tended to produce lower cost results.

Synthesis Model Results for Roseville

The Synthesis Model can be run with two levels of support aggregation, Wire Center and Density Zone, and both are useful in analyzing the results which the model produces for Roseville.

Using the FCC's recommended input values, the Synthesis model produces average line costs for Roseville of $17.52/line/month in the Wire Center mode, and $17.46/line/month in the Density Zone mode. (While it would be reasonable to expect the two aggregations to produce identical results, this difference represents just one of the many mysteries surrounding the Synthesis Model.) The nationwide average cost determined by the Synthesis Model is approximately $20/line/month, meaning that Roseville's study area average costs are approximately 88% of the nationwide average.

For Roseville's two wire centers the Synthesis Model produces the following results:

CLLI	Avg Cost/Line
CTHTCAXF	$17.15
RSVLCAXF	$17.84

The Density Zone run produces the following results by density zone:

Density Zone*	Cost/Line	Lines
0 - 5	$ -	-
5 - 100	$ -	-
100 - 200	$ 30.35	1,875
200 - 650	$ 22.37	4,845
650 - 850	$ 21.46	2,462
850 - 2,550	$ 17.84	47,901
2,550 - 5,000	$ 15.59	42,541
5,000 - 10,000	$ 13.97	1,249
> 10,000	$ 22.34	1,720
Weighted Avg.	$ 17.46	102,593
* Lines/sq. mi.		

As will be discussed shortly, the fact that the Synthesis Model produces no Roseville customers in the first two density zones has a significant impact on the cost outcome and on the funding determination.

Since Roseville has an average study area cost of 88% of the national average, Roseville would receive no explicit funding under the new mechanism if study area costs were the qualifying criteria and a benchmark somewhere between 115% and 150% of nationwide average cost were used. Since both of Roseville's two wire centers have costs less than the national average, even if funding were computed based on wire center average cost (as some parties have advocated and the FCC has hinted that they may consider) Roseville would still not qualify for funding under the new mechanism.

These results are surprising given Roseville's experience under the current USF. In the NECA 1998 USF Annual Filing, Roseville has an average per-line cost of $301.93. When compared to the nationwide average of $245.47 this results in costs which are 123% of the nationwide average. The significant difference between the 123% and 88% of national average figures raise further questions regarding the accuracy of the Synthesis Model for Roseville.

The attached chart *FCC Synthesis Model Funding Results* shows the results for 92 NRLEC study areas.[1] Two observations can be made from this chart:

- Roseville would receive no funding under any of the new explicit funding scenarios.
- Bell Atlantic-District of Columbia is the only other NRLEC that would not qualify for at least some funding at the wire center level under any of the proposed benchmark scenarios.

Analysis of Results

A number of valid criticisms can be made of the Synthesis Model:

- It is premised on the instantaneous construction of an unrealistically "efficient" fantasy network.
- It includes a number of very questionable costing assumptions all of which have the impact of pushing the cost down.
- It exhibits a bias towards shifting costs away from urban areas and to more rural areas.
- The model and its underlying code is a virtual "black box" incapable of analysis and review by even the most skilled programmers.
- The data used to locate customers within the wire center is not available for public inspection or use, and the "road surrogate" data that is available is seriously flawed.
- It is premised on a single set of nationwide cost inputs which will be used for all NRLECs from the largest to the smallest.
- The methodology utilized to derive these inputs is seriously flawed.

For comparative purposes, we have run Roseville data through both the BCPM and HAI models (circa 12/98) using both the models' proposed defaults, and a set of "common inputs" provided by the FCC Staff:

BCPM with Defaults	$26.72
BCPM with "Common"	$22.12
HAI with "Common"	$21.47
HAI with Defaults	$17.28

[1] This chart does not include the impact of the state per/line funding requirement proposed by the FCC.

This chart illustrates the significant impact that the model inputs can have on the output results.

Perhaps the single most important explanation of why Roseville comes out so low on the Synthesis Model runs is the absence of any customers in the 0-5 and 5-100 lines per square mile density bands. The HAI model has a remarkable and unexplained tendency to come out with similar cost per density band results, regardless of the study area or state is being run. Differences between study area cost are thus heavily driven by the relative population distribution in each density band. Since the model produces a result asserting that Roseville has no customers in either of its wire centers in the bottom two density bands, Roseville does not qualify for funding under the new mechanism using the Synthesis Model. It is quite possible that the flawed customer location algorithms of the Synthesis Model have mis-allocated customers, contributing to the results we have observed.

Glenn H. Brown
McLean & Brown
August 4, 1999

FCC Synthesis Model Funding Results

State	Company	Avg Cost	Lines	% Nat'l Cost	Current USF	Study Area Targeting SA 115%	SA 125%	SA 135%	SA 150%	Wire Center Targeting WC 115%	WC 125%	WC 135%	WC 150%
AL	BellSouth	$28.69	1,801,778	143%	$0	$10,231,398	$6,626,039	$3,020,681	$0	$157,777,738	$135,256,297	$116,462,570	$94,488,134
AL	GTE	$42.95	155,511	215%	$7,099,392	$3,100,656	$2,789,479	$2,478,301	$2,011,535	$37,229,719	$33,967,646	$31,405,865	$27,874,167
Al	GTE (Contel)	$57.34	118,951	287%	$4,359,444	$4,079,977	$3,842,156	$3,604,335	$3,247,604	$48,976,923	$46,241,810	$43,602,606	$39,644,304
AR	SBC	$26.69	896,814	133%	$3,984,924	$3,306,287	$1,507,760	$0	$0	$69,296,349	$61,117,329	$54,350,624	$45,594,162
AZ	U S WEST	$17.94	2,369,011	90%	$2,417,928	$0	$0	$0	$0	$41,622,846	$36,278,071	$31,780,258	$27,366,618
CA	GTE	$15.90	3,806,227	79%	$0	$0	$0	$0	$0	$21,492,434	$18,396,107	$16,307,631	$13,555,088
CA	GTE (Contel)	$35.13	321,299	176%	$154,140	$3,893,541	$3,250,641	$2,607,742	$1,643,393	$50,413,752	$47,115,159	$44,108,962	$40,459,674
CA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$0	$0	$0	$0	$0	$0	$0	$0
CA	SBC	$15.53	16,006,055	78%	$0	$0	$0	$0	$0	$108,242,508	$91,879,065	$79,600,131	$66,319,083
CO	U S WEST	$20.26	2,364,889	101%	$2,505,660	$0	$0	$0	$0	$68,696,660	$60,393,062	$53,035,270	$43,541,461
CT	SBC	$19.03	2,099,704	95%	$0	$0	$0	$0	$0	$20,724,339	$14,833,873	$10,169,043	$5,743,647
DC	Bell Atlantic	$11.80	923,018	59%	$0	$0	$0	$0	$0	$0	$0	$0	$0
DE	Bell Atlantic	$18.91	500,823	95%	$0	$0	$0	$0	$0	$11,760,720	$9,322,406	$7,282,234	$4,936,431
FL	BellSouth	$17.15	5,761,947	86%	$0	$0	$0	$0	$0	$40,382,696	$34,479,130	$29,498,058	$23,820,413
FL	GTE	$17.06	2,090,129	85%	$0	$0	$0	$0	$0	$9,509,543	$7,379,606	$6,148,932	$4,802,611
FL	Sprint	$21.04	1,433,579	105%	$0	$0	$0	$0	$0	$29,804,663	$21,885,656	$17,130,435	$12,566,448
FL	Sprint (Centel)	$24.96	378,849	125%		$737,796	$0	$0	$0	$28,070,130	$25,651,050	$23,690,228	$20,879,666
GA	BellSouth	$21.09	3,598,169	105%	$2,960,956	$0	$0	$0	$0	$106,171,470	$88,334,026	$74,229,540	$60,128,475
HI	GTE	$16.34	613,082	82%	$0	$0	$0	$0	$0	$7,948,141	$7,206,037	$6,609,462	$5,793,726
IA	U S WEST	$20.75	1,055,858	104%	$0	$0	$0	$0	$0	$31,413,486	$26,126,365	$22,018,906	$17,843,910
ID	U S WEST	$24.98	472,339	125%	$0	$929,799	$0	$0	$0	$31,236,905	$27,603,423	$24,877,567	$21,533,967
IL	Ameritech	$15.64	6,264,639	78%	$0	$0	$0	$0	$0	$31,169,057	$26,359,097	$22,461,108	$18,291,745
IL	GTE	$34.93	625,893	175%	$0	$7,459,706	$6,207,294	$4,954,882	$3,076,264	$96,063,796	$86,240,872	$77,823,683	$67,243,103
IL	GTE (Contel)	$49.03	180,217	245%	$0	$4,688,976	$4,328,362	$3,967,748	$3,426,826	$57,269,913	$54,042,282	$50,969,964	$46,581,568
IL	Sprint	$16.86	206,033	84%	$0	$0	$0	$0	$0	$4,067,420	$3,669,384	$3,320,270	$3,001,279
IN	Ameritech	$20.37	1,871,463	102%	$0	$0	$0	$0	$0	$48,052,224	$41,304,262	$35,890,548	$29,505,244
IN	GTE	$26.65	669,074	133%	$0	$2,507,196	$1,128,359	$0	$0	$52,715,731	$46,934,899	$41,651,719	$35,624,431
IN	GTE (Contel)	$45.50	164,194	227%	$0	$3,692,477	$3,363,925	$3,035,372	$2,542,544	$44,330,354	$40,350,586	$36,702,390	$31,985,352
KS	SBC	$22.56	1,239,765	113%	$0	$0	$0	$0	$0	$54,917,375	$48,025,966	$42,512,305	$36,397,114
KY	BellSouth	$29.25	1,122,168	146%	$867,252	$7,000,770	$4,755,272	$2,509,773	$0	$120,220,965	$106,442,759	$95,595,274	$82,368,625
KY	Cincinnati	$24.11	181,349	120%	$0	$199,212	$0	$0	$0	$10,851,637	$9,596,340	$8,352,451	$6,486,617
KY	GTE	$31.12	416,296	156%	$664,404	$3,375,536	$2,542,526	$1,709,520	$460,007	$53,255,631	$48,437,350	$44,057,761	$37,981,657
LA	BellSouth	$24.09	2,130,820	120%	$0	$2,297,874	$0	$0	$0	$131,384,519	$116,945,986	$104,379,585	$89,307,402
MA	Bell Atlantic	$16.21	4,109,503	81%	$0	$0	$0	$0	$0	$21,347,621	$16,643,935	$13,255,172	$9,944,248
MD	Bell Atlantic	$17.87	3,332,491	89%	$0	$0	$0	$0	$0	$51,654,911	$42,091,616	$33,832,603	$24,688,006
ME	Bell Atlantic	$29.54	629,415	148%	$0	$4,109,136	$2,849,676	$1,590,217	$0	$64,886,915	$57,287,826	$50,789,864	$42,987,329
MI	Ameritech	$18.96	4,932,029	95%	$0	$0	$0	$0	$0	$101,457,204	$84,481,861	$71,614,312	$56,533,877
MI	GTE	$37.63	658,734	188%	$772,320	$9,629,703	$8,311,576	$6,993,450	$5,016,259	$119,194,312	$106,005,486	$94,505,425	$79,772,957
MI	Total	$21.16	5,590,763	106%	$0	$0	$0	$0	$0	$220,651,517	$190,467,147	$166,119,736	$136,306,834
MN	GTE	$64.64	116,134	323%	$0	$4,834,484	$4,602,100	$4,369,716	$4,021,140	$58,033,906	$55,228,983	$52,782,539	$49,176,687
MN	U S WEST	$20.22	2,103,613	101%	$0	$0	$0	$0	$0	$75,519,776	$66,060,403	$57,616,280	$48,880,271
MO	GTE	$36.49	119,610	182%	$6,465,758	$1,851,383	$1,612,044	$1,372,704	$1,013,695	$23,982,145	$22,643,716	$21,433,694	$19,616,658
MO	GTE (Contel)	$55.00	234,135	275%	$2,503,020	$7,489,627	$7,021,123	$6,552,619	$5,849,863	$91,140,491	$86,606,448	$82,413,931	$76,474,037
MO	SBC	$21.17	2,368,354	106%	$0	$0	$0	$0	$0	$92,899,668	$81,574,070	$72,463,543	$61,905,696
MS	BellSouth	$36.02	1,224,211	180%	$7,339,776	$18,373,571	$15,923,925	$13,474,276	$9,799,809	$234,242,296	$212,890,902	$194,057,534	$169,310,814
MT	U S WEST	$29.69	336,539	148%	$1,762,620	$2,247,576	$1,574,161	$900,747	$0	$35,992,335	$33,263,263	$30,630,704	$27,828,707
NC	BellSouth	$21.29	2,166,681	106%	$1,766,069	$0	$0	$0	$0	$58,030,050	$46,820,441	$37,992,748	$28,500,934
NC	GTE	$19.64	188,843	98%	$40,596	$0	$0	$0	$0	$3,644,374	$3,304,312	$3,036,925	$2,638,539
NC	North State	$20.27	111,211	101%	$2,469,732	$0	$0	$0	$0	$1,012,397	$778,328	$546,367	$275,976
NC	Sprint	$32.92	1,045,627	165%	$0	$10,360,595	$8,268,296	$6,175,998	$3,037,546	$129,718,044	$111,912,317	$97,751,490	$79,817,998
ND	U S WEST	$23.30	243,342	116%	$0	$70,204	$0	$0	$0	$15,233,861	$13,783,160	$12,703,659	$11,597,788
NE	Aliant	$31.49	259,554	157%	$0	$2,200,629	$1,681,261	$1,161,893	$382,842	$37,390,434	$35,067,084	$33,162,496	$30,860,925
NE	U S WEST	$24.53	518,839	123%	$0	$787,857	$0	$0	$0	$30,396,316	$27,846,861	$25,370,263	$22,367,826
NH	Bell Atlantic	$23.51	708,389	117%	$0	$353,132	$0	$0	$0	$35,688,159	$31,537,201	$27,753,978	$23,176,669
NJ	Bell Atlantic	$15.04	5,623,659	75%	$0	$0	$0	$0	$0	$8,302,004	$5,041,794	$2,942,347	$1,603,917
NM	U S WEST	$23.31	742,394	116%	$4,603,776	$221,605	$0	$0	$0	$35,921,579	$31,234,488	$27,343,383	$22,432,165
NV	SBC	$23.86	308,866	119%	$0	$262,090	$0	$0	$0	$27,341,028	$26,090,006	$24,965,421	$23,729,590
NV	Sprint	$14.35	730,274	72%	$0	$0	$0	$0	$0	$3,122,248	$3,040,347	$2,958,446	$2,835,594
NY	Bell Atlantic	$16.00	10,765,482	80%	$0	$0	$0	$0	$0	$139,899,556	$121,251,512	$106,317,526	$87,911,260
NY	Frontier	$18.82	527,349	94%	$0	$0	$0	$0	$0	$11,712,550	$9,909,927	$8,153,872	$6,076,044
OH	Ameritech	$17.52	3,776,240	88%	$0	$0	$0	$0	$0	$44,268,926	$37,446,209	$32,204,471	$25,936,429
OH	Cincinnati	$17.28	747,459	86%	$0	$0	$0	$0	$0	$5,131,953	$4,061,556	$3,155,126	$2,172,018
OH	GTE	$36.16	817,983	181%	$0	$10,755,249	$9,118,465	$7,481,682	$5,026,506	$133,861,856	$119,560,379	$106,733,438	$90,289,552
OH	Sprint	$31.73	554,151	159%	$0	$4,831,365	$3,722,509	$2,613,653	$950,369	$64,204,761	$54,915,577	$47,768,722	$39,563,059
OK	GTE	$34.23	107,866	171%	$0	$1,210,319	$994,439	$778,559	$454,739	$17,745,184	$16,521,278	$15,297,372	$13,567,197
OK	SBC	$24.42	1,519,540	122%	$0	$2,140,272	$0	$0	$0	$95,156,981	$84,144,433	$74,902,766	$63,527,682
OR	GTE	$23.48	430,850	117%	$0	$201,853	$0	$0	$0	$24,713,361	$21,882,899	$19,465,023	$16,642,475
OR	USW	$19.64	1,258,768	98%	$17,076	$0	$0	$0	$0	$32,001,738	$27,159,544	$23,662,192	$19,515,721
PA	Bell Atlantic	$17.59	5,842,150	88%	$0	$0	$0	$0	$0	$73,957,722	$62,098,426	$53,091,087	$42,583,205
PA	GTE	$26.23	502560	131%	$0	$1,617,489	$611,867	$0	$0	$36,743,869	$31,115,599	$25,969,489	$19,702,606
RI	Bell Atlantic	$17.19	624,292	86%	$0	$0	$0	$0	$0	$4,494,159	$3,420,623	$2,552,719	$1,596,823
SC	BellSouth	$24.55	1,335,219	123%	$5,578,298	$2,054,234	$0	$0	$0	$67,970,127	$56,069,760	$46,036,783	$33,614,869
SC	GTE	$28.81	175,291	144%	$0	$1,016,425	$665,668	$314,910	$0	$17,813,866	$16,054,476	$14,407,182	$12,134,594
SD	U S WEST	$26.50	262,654	132%	$0	$916,288	$390,698	$0	$0	$20,561,052	$19,095,644	$17,717,615	$15,914,901
TN	BellSouth	$24.74	2,470,701	124%	$0	$4,270,807	$0	$0	$0	$145,158,069	$124,670,013	$107,513,242	$85,895,240
TN	Sprint	$26.48	232,393	132%	$0	$801,407	$336,389	$0	$0	$15,384,179	$13,011,975	$10,639,771	$7,407,856
TX	GTE	$26.55	1,506,519	133%	$0	$5,330,814	$2,316,271	$0	$0	$133,194,323	$121,826,213	$111,653,251	$99,310,420
TX	GTE (Contel)	$63.49	223,612	317%	$496,769	$9,059,574	$8,611,726	$8,163,878	$7,492,107	$110,204,699	$105,214,533	$100,416,053	$93,481,444
TX	SBC	$18.96	8,528,179	95%	$0	$0	$0	$0	$0	$206,402,287	$179,195,879	$156,420,853	$127,252,860
TX	Sprint	$30.48	165,248	152%	$5,150,976	$1,379,820	$1,009,138	$638,457	$82,435	$23,387,543	$22,216,621	$21,192,835	$19,711,985
UT	USW	$18.50	961,536	92%	$0	$0	$0	$0	$0	$16,765,924	$14,381,577	$12,594,481	$10,699,035
VA	Bell Atlantic	$19.13	3,174,231	96%	$0	$0	$0	$0	$0	$101,589,050	$93,394,856	$85,751,229	$75,137,622
VA	GTE	$32.46	463,713	162%	$0	$4,570,362	$3,602,453	$2,634,543	$1,182,678	$70,594,244	$65,919,669	$61,304,642	$54,707,122
VA	Sprint	$44.95	100,166	225%	$0	$2,197,492	$1,997,060	$1,796,627	$1,495,979	$26,554,766	$24,534,069	$22,513,412	$19,482,396
VA	Sprint (Cental)	$42.02	263,787	210%	$1,263,000	$5,014,195	$4,486,357	$3,958,520	$3,166,763	$63,343,064	$58,766,868	$54,328,471	$48,082,338
VT	Bell Atlantic	$31.19	313,359	156%	$1,454,568	$2,562,807	$1,935,775	$1,308,744	$368,197	$39,079,951	$35,462,138	$32,290,040	$28,207,948
WA	GTE	$21.79	677,548	109%	$0	$0	$0	$0	$0	$26,058,858	$22,896,111	$20,993,348	$18,169,884
WA	U S WEST	$18.29	2,250,796	91%	$0	$0	$0	$0	$0	$36,896,797	$32,192,606	$28,453,131	$23,966,244
WI	Ameritech	$18.73	2,005,228	94%	$0	$0	$0	$0	$0	$26,188,509	$20,723,325	$16,185,264	$11,316,437
WI	GTE	$44.20	456,649	221%	$0	$9,675,707	$8,761,953	$7,848,198	$6,477,566	$117,250,766	$107,712,544	$99,075,165	$86,642,415
WV	Bell Atlantic	$33.92	773,859	170%	$1,673,112	$8,441,641	$6,893,149	$5,344,657	$3,021,919	$113,018,191	$102,832,268	$93,699,988	$81,201,661
WY	U S WEST	$33.28	225,950	166%	$4,445,856	$2,320,168	$1,868,042	$1,415,916	$737,727	$28,471,326	$25,267,604	$22,706,517	$19,189,892
					$79,052,904	$200,660,861	$149,507,935	$114,779,319	$75,966,313	$5,292,756,579	$4,668,140,492	$4,149,877,795	$3,515,604,597